(d) the steps being taken to speed up the construction work of power projects, keeping in view the backwardness and the acute electricity problem in this area?

THE MINISTER OF POWER (SHRI SUSHIL KUMAR SHINDE): (a) Maharashtra State Power Generation Company Ltd. (MAHAGENCO) has intimated that in the Vidarbha region of Maharashtra the following three generation projects have been identified for completion in the XI Plan under the State Sector:

1. Paras Thermal Power Project (TPP) Expansion Unit-1 (250 MW)

2. Paras TPP Expansion Unit-2 (250 MW)

3. Khaperkheda TPP Expansion (500 MW)

(b) MAHAGENCO has further reported that Paras TPP Expansion Unit-1 (250 MW) has been commissioned on 31.05.2007. No other project is expected to be completed within one year.

(c) The commissioning of Paras TPP Expansion Unit-1 has been delayed by 6 months with respect to the contractual schedule due to delay in supply and erection of equipment by the supplier. Presently, no delay is envisaged in other ongoing projects.

(d) In terms of contractual schedules, the Paras TPP Expansion Unit-2 (250 MW) and Khaperkheda TPP Expansion (500 MW) are scheduled to be commissioned in April, 2009 and March, 2010 respectively. The progress of construction of projects is being regularly monitored.

Goals to achieve literacy

*60. SHRI RAVULA CHANDRA SEKAR REDDY: Will the Minister of HUMAN RESOURCE DEVELOPMENT be pleased to state:

(a) details regarding the goals set to achieve literacy in the country especially in Andhra Pradesh during the last year, year-wise; and

(b) the present position thereof in that State?

THE MINISTER OF HUMAN RESOURCE DEVELOPMENT (SHRI ARJUN SINGH): (a) and (b) The goal of the National Literacy Mission is to achieve 75% literacy rate by 2007. No year-wise goals have been set in this regard. No assessment of the achievement has been made.

The Approach Paper to the XI Plan of the Planning Commission has set a target of achieving 85% literacy rate by the end of the Plan period. Government of Andhra Pradesh, aims to achieve the literacy level of 95% by end of 11th plan.

WRITTEN ANSWERS TO UNSTARRED QUESTIONS

Electronic measurement of earthquakes

87. SHRI JAI PARKASH AGGARWAL: Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether the Government have formulated any scheme to set up electronic system for accurate measurement of intensity of earthquakes, in the wake of severe earthquake of October, 2005;

(b) if so, the details thereof;

(c) by when this system is proposed to be set up; and

(d) whether it would find out the earthquakes from the atmospheric and ocean current?

THE MINISTER OF EARTH SCIENCES (SHRI KAPIL SIBAL): (a) and (b) Yes, Sir. India Meteorological Department (IMD) has commissioned a system to monitor earthquakes within and outside the country for all significant earthquakes, which affect India. The system consists of different types of observatories spread all over the country. Data from 40 stations are electronically collected and transmitted to central processing unit at New Delhi for accurate estimation of location of the earthquake (epicenter), time of occurrence and magnitude (size) of the earthquake. The estimation of intensity over a wider affected area around the epicenter is done through post earthquake surveys.

(c) Additional in the aftermath of the Great Sumatra Earthquake of 26th December, 2004, Ministry of Earth Sciences has set up an Early Warning System for Tsunamis at the Indian National Centre for Ocean Information Services (INCOIS), Hyderabad. As part of this, a most modern real time seismic monitoring network has been made operational with four field stations at Bhuj, Hyderabad, Chennai and Shillong and two Central Receiving Stations at Hyderabad and New Delhi already functional. Installation of 13 more stations is in progress. The system has facilities for real time data transmission from field stations and automatic estimation of location, time of occurrence and magnitude of the earthquake over the north Indian Ocean zone.

(d) The new system does not depend upon observations of atmosphere or ocean current for detecting the earthquakes. It is based on sensors for detecting very small displacements of the ground during earthquakes. However, instrumentation commissioned over the Bay of Bengal and the Arabian Sea as a part of Tsunami Early Warning System measures/monitors sea level changes, sea bottom pressure changes, wave amplitudes and tides in real time following earthquake occurrence in the north Indian Ocean.

Instruments/computers for weather forecasting

88. SHRI ABU ASIM AZMI: Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether the instruments/computers available for weather forecasting, ocean information and tropical meteorology are completely out-dated;

(b) if so, whether Government are planning to buy/produce super computers for tracking changes in the climate of the country;

(c) if so, the details thereof; and

(d) the funds allocated for the purpose?

THE MINISTER OF EARTH SCIENCES (SHRI KAPIL SIBAL): (a) Not totally, Sir. Although, India Meteorological Department (IMD) has been upgrading its instruments/computers from time to time, there exists an urgent requirement of rapidly upgrading and expanding the density of observational network and enhancing forecasting capabilities by employing advanced prediction models/tools.

(b) and (c) Ministry of Earth Sciences (MoES) has taken major initiative for procurement of Supercomputers/High Performance Computers (HPCs) for use in its various centres—IMD, National Centre for Medium Range Weather Forecasting (NCMRWF), Noida (U.P.), Indian Institute of Tropical Meteorology (IITM), Pune and Indian National Center for Ocean Information Services (INCOIS), Hyderabad. HPC infrastructure shall be used to run advanced numerical models for weather, ocean state and climate prediction. Actions for procurement of HPCs have already been initiated.